

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/670,602	KIND, JAAKOB FRIEDRICH	
	Examiner Chad Rapp	Art Unit 2125	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the amendment filed on 12/29/06.

2.  The allowed claim(s) is/are 1-20.

3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
- 4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5.  Notice of Informal Patent Application
- 6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_\_.

## **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

As to independent claim 1 , “performing logical operations on the bit strings to determine whether the selection conditions permit at least one and at most one of a variant of a component to be included in the configurable product”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 4, “applying the selection conditions to the bit matrix, the selection conditions defining allowed combinations of values of the characteristics, to determine whether the selection conditions provide for selecting at most one and at least one of variants corresponding to a component”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 9, “forming a second bit string corresponding to a second selection condition, the second bit string containing logic values representing combinations of values of the characteristics allowed by the second selection condition; and performing a logic operation on the first and second bit strings to determine whether the first and second selection conditions allow a same combination of values of the characteristics”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 11, “performing logical operations on the bit strings to determine whether the selection conditions permit at least one and at most one of a variant of a component to be included in the configurable product”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 16, “performing logical operations on the bit strings to determine whether the selection conditions permit at least one and at most one of a variant of a component to be included in the configurable product”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 19, “applying the selection conditions to the bit matrix, the selection conditions defining allowed combinations of values of the characteristics, to determine whether the selection conditions provide for selecting at most one and at least one of variants corresponding to a component”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

As to independent claim 20, “forming a first bit string corresponding to a first selection condition, the first bit string containing logic values representing combinations of values of the characteristics allowed by the first selection condition; forming a second bit string corresponding to a second selection condition, the second bit string containing logic values representing combinations of values of the characteristics allowed by the second selection condition; and anding the first and second bit strings to determine whether the first and second selection conditions allow a same combination of values of the characteristics”, in combination with the other claimed elements and features is not taught nor fairly suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

2. Prior art

Lichtenberg et al. discloses configuring a product using bit vectors of all possible consistent configurations. All configurations tested against rules of parts combination are put into a hash table. These configurations do not use selection conditions; they only use all the possible configurations. Lichtenberg et al. discloses all the components of a final product where as the present application uses bit strings, and the bit strings have a smaller amount of information because of the selections made down the line of the string. Lichtenberg et al. also does not disclose performing logical operations on the bit strings.

Wongvasu et al. does not disclose what Lichtenberg et al. lacks specifically the selection conditions.

*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Rapp whose telephone number is (571)272-3752. The examiner can normally be reached on Mon-Fri 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chad Rapp  
Examiner  
Art Unit 2125

cjr

*Albert W. Paladini 1-22-07*  
ALBERT W. PALADINI  
PRIMARY EXAMINER